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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18TH STREET - SUITE 300 DENVER, CO 80202-2466 http://www.epa.gov/region08

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PROGRESS OIL POLLUTION REPORT
Cut Bank Oil Seep
Cut Bank, Montana

I. BACKGROUND

Date: August 20, 2003

Subject: Oil Sheen in Cut Bank River

POLREP No.: POLREP #3

OSC Name: Al Lange, On-Scene Coordinator

Agency: EPA

Unit: Region VIII

Emergency Response Program 999 18th Street, Suite 300 Denver, Colorado 80202

(303) 312-6987

Party Conducting the Action: EPA
Federal Project # (FPN): EO2806
Date Current Action Started: 08/23/02

II. SITUATION

Date of Original Notification: NRC620532 on 8/20/02

Material Involved:

Quantity Discharged:

Substantial Threat:

Unknown

Yes

Resource Affected: Cliff face and Cut Bank River

Source Identification: Seepage from sandstone and silts-shales near the Cut Bank Oil Field.

Completion Date: TBD

III. SITE INFORMATION

A. Incident Category

Section 311(c) of the Clean Water Act, 33 U.S.C. 1321(c) as amended by the Oil Pollution Act of 1990.

B. Site Description

The site is located southwest of the town of Cut Bank Montana, just west of a residence at 404 Mountain View Boulevard and at North Latitude 48°37.851' and WestLongitude 112° 20.336'. It consists of a steep cliff face that is composed of inter-bedded sandstones, shaley siltstones, and shales of the upper Cretaceous Two Medicine Formation. Near the top of the cliffs water and black oil are seeping from the sandstones and shaley siltstones. Further lab analyses have shown that the oil closely resembles a Canadian

Crude. A grind out of the product determined the gravity to be 29°API. The water-oil was flowing down rills from small basin areas and coalescing into one stream that enters the River. The cliff is steep, dropping about 200' in a distance of about 530'.

IV. RESPONSE INFORMATION

A. Situation

1. Removal Actions

The Cut Bank Fire Department installed some straw bales to absorb the oil.

The Cut Bank River was boomed and containment of the sheen was nearly complete.

The Montana Department of Environmental Quality requested EPA's presence to stabilize the situation.

EPA's contractor (Environmental Restoration) were activated and sent to the site.

The stabilization work occurred on August 24 - 26, 2002.

Thereafter, the following activities were coordinated by the OSC:

The local fire department is tasked to remove the oil as necessary and maintain the system of three tanks. A Pollution Removal Funding Authorization was issued to the Glacier County for \$ 15,000.00.

The oily pads are being stored on site in barrels.

2. Enforcement

The EPA has issued a Unilateral Administrative Order to

- 1. Cenex, Inc. & Cenex Harvest States Cooperatives, Inc.
- 2. ConocoPhillips, Inc., and
- 3. Montana Refining Company, Navajo Northern, Inc. & Black Eagle, Inc.

B. Activities that have taken place at the Site:

AUGUST 23-24, 2002 The removal actions consisted of digging far enough into cliffface so that tin sheeting will direct the water/oil to enter 126 gallon stock tanks. PVC piping was installed to allow separation of the oil and water with the water draining from under the oil. Further examination found some new oil seeps below the first tank's level, so a second tank was installed about 25'below the first. The oil was removed using sorbent pads. The system worked well and after a few hours, there was a very noticeable decrease in the sheen on the Cut Bank River and after 12 hours no sheen was noted on the River from this flowage. Water flowed into tank one at about 1.1 gallons per minute and slightly faster into tank two at 1.8 gallons per minute. Tank one collects the greater amount of oil at an estimated 2 gallons per day.

However, the following morning, a very visible sheen was noted entering the Cut Bank River about 30' down stream from the sheen noted above. Examination of the neighboring small drainage basin found significant oil/water flowage. In this case the cliff was too steep to do

hand digging, so tank number three was installed at the River's edge. A raft was used to transport the equipment across the River.

The number of seeps feeding Tanks 1 & 2 have increased only by a few spots. One seep along the sandstone cliff above Tank 1 has grown from a spot 1 foot high by 3 feet long to 3 feet high and about 7 feet long. Both water and oil continually ooze and drip from the sandstone face. The staining in this area has grown to encompass a greater portion of the cliff face.

The seep areas feeding Tank 3 have increased from a few seepages to a dozen or more; and, since the 25th of September, have become the major source of oil (see tabulation). The area of the seeps extends about 180' along the cliff face. **During site visits in winter and spring of 2003 to this area it has been noted that small pools of oil are present; however, the oil was not flowing down the slope or to the River.**

Some water/oil seeps are oozing from the sandstone faces as above but most are oozing from bedding planes and fracture faces in the firm-hard silty shale below the sandstone ledges.

During late October, 2002, pumping and tank heating systems were installed to contain and control any oil during the cold winter months as the steep slopes could not be safely traversed. From mid December to the present time oil flowage into the tanks has been only a trace - i.e., an occasional drop or small blob of oil.

Oil collected through May 3, 2003 totals 1,427 gallons, which has been delivered to an oil recycler.

C. Future Activities:

The future activities are to plan and develop a system whereby crude oil will be collected prior to its reaching the waters of Cut Bank Creek (River). In order to accomplish this, some further investigations are needed, among them are the drilling and coring of nearby cliff sandstones and siltstones in an attempt to determine the oil's path.

D. Key Issues

There are no key issues at this time.

V. COST INFORMATION

EPA opened and increased the fund to \$150,000. The expenditures as of 7/17/03 are about \$60,600.00.